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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/589,895

**Applicant(s)**

SASAKI, YOSHIYUKI

**Examiner**

ADAM R. GIESY

**Art Unit**

2627

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 and 21-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 17-19 are objected to because of the following informalities:

Examiner asserts that the preambles as recited in claims 17-19 should be changed to match the amended preamble of claim 16 from which they all depend (i.e. "The program as claimed in claim XX" should be changed to –The computer readable recording medium as claimed in claim XX--).

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 8-19, 21-26, and 28-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Ito et al. (hereinafter Ito – USPN 6,160,778).

Regarding claim 1, Ito discloses a defect management information setting method for setting defect management information for managing a defect area in a data area of an information recording medium, comprising: a step of dividing the data area into a plurality of partial areas such that logical addresses continue (see Figure 1A, element 6; see also column 2, lines 46-50) and setting defect management information for each partial area, wherein the plurality of partial areas includes first and second partial areas corresponding to first and second data types for recording thereon (see

Figure 3 – note that defect management data [4b] is set according to the two partial areas, one containing AV data [see field 'File-A'] and the other containing non-AV data [see field 'File-B']).

Regarding claim 2, Ito discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above and further that the defect management information includes information on determination criteria for detecting a defect area, and the determination criteria is independently set for each of at least two areas in the plurality of partial areas (this is inherent for identifying the defective blocks dependent of the data type since AV data and non-AV data are recorded in two different ways; see also column 11, line 61 thru column 12, line 24; see also Figure 7, element 731).

Regarding claim 3, Ito discloses all of the limitations of claim 2 as discussed in the claim 2 rejection above and further that the plurality of partial areas include a partial area where defect management is not performed (Figure 3, 'File-A'; Examiner asserts that no defect management is carried out in the AV data area since information is carried out in real time).

Regarding claim 4, Ito discloses all of the limitations of claim 3 as discussed in the claim 3 rejection above and further that the information recording medium is a disc-like medium, and the partial area where the defect management is not performed is provided in an inner periphery side of a partial area where defect management is performed (see Figure 3).

Regarding claim 5, Ito discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above and further that the defect management information includes

information on a replacement area of the defect area, and the replacement area is set for each partial area (see Figure 3, element 13 – note that this contains a replacement list).

Regarding claim 6, Ito discloses all of the limitations of claim 3 as discussed in the claim 3 rejection above and further that the defect management information includes information on a replacement area of the defect area, and the replacement area is set for each of partial areas of the plurality of partial areas excluding a partial area where the defect management is not performed (see column 20, lines 17-23).

Regarding claim 8, Ito discloses all of the limitations of claim 5 as discussed in the claim 5 rejection above and further that in at least one partial area of the plurality of partial areas, a corresponding replacement area is provided adjacent to the at least one of the partial area (see Figure 4, elements 7 and 8).

Regarding claim 9, Ito discloses all of the limitations of claim 5 as discussed in the claim 5 rejection above and further that in at least one partial area of the plurality of partial areas, corresponding replacement areas are provided in the at least one partial area in a distributed manner (see Figure 4, elements 7 and 8).

Regarding claim 10, Ito discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above and further that the step of setting the defect management information is performed when initializing the information recording medium (Figure 8, element 802).

Regarding claim 11, Ito discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above and further that a method for dividing the data area and a

defect management scheme for each partial area are set by a user (inherently suggested since a user needs to actively select the information to be recorded onto a disc - that information can include any combination of AV and non-AV data as evidenced by Figure 3).

Regarding claim 12, Ito discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above and further comprising a step of recording the defect management information on a predetermined area of the information recording medium (inherently disclosed by Figure 4, element 4b).

Regarding claim 13, Ito discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above and further that the defect management information includes an identifier for identifying a data structure of the defect management information (see Figure 3, element 11).

Regarding claim 14, Ito discloses a recording method for recording data on a data area of an information recording medium, comprising: a step of determining, based on the defect management information set by the defect management information setting method claimed in claim 13, whether an identifier included in the defect management information corresponding to a partial area to which an area where the data is to be recorded belongs is known; and a step of permitting data recording when the identifier is known as a result of the determination (see Figure 13, steps 1308-1313).

Regarding claim 15, Ito discloses a defect management method for managing a defect area in a data area of an information recording medium, comprising: performing defect management of a recording area where data is recorded based on information on

the recording area and defect management information that is set by the defect management information setting method as claimed in claim 1 (see Figure 13).

Regarding claim 16, Ito discloses a computer readable recording medium recording a program used in an information recording apparatus for recording data on an information recording medium, the program causing a control computer for the information recording medium to execute: a step of dividing a data area into a plurality of partial areas such that logical addresses continue and setting defect management information for each partial area, wherein the plurality of partial areas includes first and second partial areas corresponding to first and second data types for recording thereon (inherently disclosed by Figure 3 – note plural sections of AV and non-AV data).

Regarding claim 17, Ito discloses all of the limitations of claim 16 as discussed in the claim 16 rejection above and further that the program further causing the control computer to execute a step of recording the defect management information on a predetermined area of the information recording medium (inherently disclosed by Figure 4, element 4b).

Regarding claim 18, Ito discloses all of the limitations of claim 16 as discussed in the claim 16 rejection above and further that the defect management information includes an identifier for identifying a data structure of the defect management information, and the program further causes the control computer to execute: a step of determining, based on the defect management information set by the step of setting, whether the identifier corresponding to a partial area to which an area where the data is

to be recorded belongs is known; and a step of permitting data recording when the identifier is known as a result of the determination (see Figure 13, steps 1308-1313).

Regarding claim 19, Ito discloses all of the limitations of claim 16 as discussed in the claim 16 rejection above and further that the program further causing the control computer to execute: a step of performing defect management of a recording area where data is recorded based on defect management information that is set by the step of setting and information on the recording area (see Figure 13).

Regarding claim 21, Ito discloses an information recording apparatus for recording data on an information recording medium, comprising: setting means for dividing a data area of the information recording medium into a plurality of partial areas such that logical addresses continue and setting defect management information for each partial area (inherently disclosed by Figure 3 – note plural sections of AV and non-AV data); recording means for recording data on the data area (see abstract); and defect management means for performing defect management for a recording area where the data is recorded based on information on the recording area and the defect management information, wherein the plurality of partial areas includes first and second partial areas corresponding to first and second data types for recording thereon (see abstract).

Apparatus claims 22-26 and 28-34 are drawn to the apparatus corresponding to the method of using same as claimed in claims 2-6 and 8-14. Therefore apparatus claims 22-26 and 28-34 correspond to method claims 2-6 and 8-14, and are rejected for the same reasons of anticipation (obviousness) as used above.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (hereinafter Ito – USPN 6,160,778) in view of Fukushima et al. (hereinafter Fukushima – USPN 5,237,533).

Regarding claim 7, Ito discloses all of the limitations of claim 5 as discussed in the claim 5 rejection above. Although Ito discloses that the spare areas are used as replacement areas (see column 5, lines 30-42), Ito does not disclose the allocation of spare areas between the data sections (although many unallocated areas are noted - see Figure 4).

Fukushima discloses a spare area between data areas (see Figure 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the usage of the spare area as a replacement area as disclosed by Ito with the existence of a spare area between data sections as disclosed by Fukushima, the motivation being to allow for a shorter traveled distance for the optical pickup while recording non-AV data.

Apparatus claim 27 is drawn to the apparatus corresponding to the method of using same as claimed in claim 7. Therefore apparatus claim 27 corresponds to

method claim 7, and is rejected for the same reasons of anticipation (obviousness) as used above.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-19 and 21-34 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Park (US Doc. No. 2004/0240341) discloses a defect detection processes for determining a defect on an optical disc.

b. Ko (USPN 6,674,697) discloses a defect management method and replacement areas in an optical disc.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADAM R. GIESY whose telephone number is (571)272-7555. The examiner can normally be reached on 8:00am- 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne R. Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARG 2/11/2009

/Adam R. Giesy/  
Examiner, Art Unit 2627

/Wayne Young/  
Supervisory Patent Examiner, Art Unit 2627